ABSTRACT

A method for delivering molecules to a central nervous system (CNS) of a subject includes supplying the molecules to a blood circulation of the CNS; supplying, to a body of the subject, a carrier system that encapsulates a nitric oxide (NO) facilitator; and applying energy to the carrier system at an energy level sufficient to cause the carrier system to release the NO facilitator in a blood circulation of the subject in a vicinity of a blood-brain barrier (BBB) of the subject and thereby increase passage of the molecules from the blood circulation of the CNS, through the BBB, and into the CNS of the subject.